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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,982	02/16/2001	Yrjo Suolahti	713-390	2810

7590

12/05/2003

LOWE HAUPTMAN GILMAN & BERNER, LLP
1700 Diagonal Road, Suite 310
Alexandria, VA 22314

EXAMINER

DURAND, PAUL R

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 12/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/783,982

Applicant(s)

SUOLAHTI, YRJO

Examiner

Paul Durand

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 12-14, 18, 20-24 and 28-31 is/are rejected.
- 7) ☒ Claim(s) 15-17, 19, 25-27 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/8/03 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 12-14,18,20-24 and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humphrey (US 4,706,443) in view of Schmitz (US 4,718,219) and in further view of Paavola et al (US 5,875,16).

In regard to claims 12,20,22,28,30 and 31, Humphrey discloses the invention substantially as claimed including a wrapping machine 2, mounted film roll 16, attached to a frame, first and second pre stretch rollers 18 and 32, that are parallel, coupled to and offset from each other, that operate at different velocities through the use of motor 20, a pendulum assembly, comprised of freely rotating diverter roller 38, pendulum

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mount arms 40, and rod 60 that functions as an arbor, actuators 52 and 54 functioning in a spring manner to bias the pendulum assembly so that the tension in the web is constant during operation and deflecting roller 58 located parallel to and downstream of the pre stretch and the pendulum rollers (see Figs. 1-6, 9, C8, L57-69, C9, L15-22, L56-69 and C10, L1-2, L38-51). What Humphrey does not disclose is the use of free rotating pre stretch rollers and feeding means and the use of a wrapping ring. However, Schmitz teaches that it is old and well known in the art of wrapping to provide a wrapping machine comprised of film 5, pulled off of roll 6, as the web is pulled by the relative movement of carriage 1, pre stretching device 7, comprised of rollers 8 and 9, fixed on arms 14 and 15, that stretch the film, frictional gearing mechanism 10, functioning as a transmission, comprised of gear wheels 12 and 13, that are of different diameters to provide a velocity ratio for the purpose of providing a pre stretch on the film prior to wrapping (see abstract, Figs. 1, 2, 4, C1, L26-32, C2, L44-53 and C4, L1-23). Furthermore, Paavola teaches that it is old and well known in the art of wrapping to provide a wrapping machine consisting of a film dispenser 3, frame 4, supporting units 26, pre stretching rollers 11 and 12, deflecting and diverting roller 6 and spring loaded pendulum roller (See Fig. 6) that is parallel to the pre-stretching rollers and diverting roller with a circular track 25 for the purpose of moving the wrapping head around an object. Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Humphrey with the free rotating rollers as taught by Schmitz and the track wrapping means as taught by Paavola for the purpose of increasing operational efficiency.

In regard to claims 13 and 23, Humphrey discloses the invention substantially as claimed including a pendulum assembly, comprised of freely rotating diverter roller 38, pendulum mount arms 40, and rod 60 that functions as an arbor, actuators 52 and 54 functioning in a spring manner to bias the pendulum assembly so that the tension in the web is constant during operation (See Figs. 2-4).

In regard to claims 14 and 24, While Humphrey does not disclose specific stops for the pendulum arm, the examiner takes Official Notice that it is old and well known in the art of tension arms to provide "hard" stops that prevent the arm from moving past a pre designated position for the purpose of preventing damage to other components and to the arm itself. Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Humphrey with pendulum arm stops for the purpose of reducing machine damage.

In regard to claim 21, Humphrey discloses the invention substantially as claimed except for the transmission gear for the pre stretch rollers and the film arrangement. While Schmitz discloses a transmission gear arrangement that is comprised of friction gears functioning by the pull of the wrapping material, Schmitz does not disclose adjustability of the gearing. However, Paavola teaches that it is old and well known in the art of wrapping to provide a wrapping machine device 10, with mutually engaged rollers 11 and 12, direct transmission with gears 20 and 21 attached to rollers 11 and 12 with selectable transmission ratio, which could comprise a gear ratio of .90, depending on film thickness and desired pre-tension for the purpose of properly pre stretching a film (see C5, L4-6). Therefore, it would have been obvious to one having ordinary skill

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in the art to have modified the invention of Humphrey with the transmission selection arrangement of Paavola for the purpose of properly pre stretching a film.

4. Claims 18 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humphrey in view of Schmitz and in further view of Paavola et al and in further view of Min (US 5,377,926).

Humphrey discloses the invention substantially as claimed including actuators 52 and 54 functioning in a spring manner to bias the pendulum assembly so that the tension in the web is constant during operation. What Humphrey does not disclose is the use of a helical spring with a varied spring force. However, Min teaches that it is old and well known in the art of spring tension arms to provide a helical spring 14, connected to arm 13 for the purpose of maintaining a tension arm in a predetermined range of motion (see Fig.4 and C2, L65-68). Furthermore, in regard to the limitation of the spring having a varied spring force, the examiner takes Official Notice that it is old and well known in the art of spring design that the spring force of a spring varies over the distance of deformation. Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Humphrey with the spring means as taught by Min for the purpose of maintaining a tension arm in a predetermined range of motion.

Allowable Subject Matter

5. Claims 15-17, 19 and 25-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 12-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 703-305-4962. The examiner can normally be reached on 0730-1800, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Paul Durand
November 26, 2003



Rinaldi I. Rada
Supervisory Patent Examiner
Group 3700